IN THE SPECIFICATION

As required by 37 CFR §1.121(b)(iii), a separate section is attached to this paper that includes pages entitled "Amendments to the SPECIFICATION", in which the changes made to each of the amended PARAGRAPHS is shown. Instruction for amending are shown below.

In the first line of the application AFTER the TITLE a NEW SECTION entitled "Cross Reference to Related Applications" is introduced. The new section is shown in the attached paper

At page 12 please DELETE the PARAGRAPH beginning on line 5 with the words "After drying " and REPLACE that paragraph with the REPLACEMENT PARAGRAPH shown in the attached paper.

At page 13 and continuing to page 14, please DELETE the PARAGRAPH beginning on line 27 with the words "As shown in FIG. 2B, ..." and REPLACE that paragraph with the REPLACEMENT PARAGRAPH shown in the attached paper.

At page 14, please DELETE the PARAGRAPH beginning on line 14 with the words "If the article ..." and REPLACE that paragraph with the REPLACEMENT PARAGRAPH shown in the attached paper.

AMENDMENTS TO THE SPECIFICATION

ON PAGE 1

PLEASE AMEND THE TITLE AS FOLLOWS:

~~METHOD FOR PROVIDING~~ EMBOSSING TOOL HAVING AN ARBITRARY THREE – DIMENSIONAL MICROSTRUCTURE ~~IN SILICON USING AN ANISOTROPIC DEEP ETCH~~

ON PAGE 1

IN THE FIRST LINE OF THE APPLICATION PLEASE ADD A NEW SECTION TITLED "CROSS REFERENCE TO RELATED APPLICATIONS" WITH THE FOLLOWING:

CROSS REFERENCE TO RELATED APPLICATIONS

This application is a divisional application of, and claims priority to and the benefit of, co-pending prior U.S. Patent Application Serial Number 10/146,421 originally filed 05/14/2002 and entitled "METHOD FOR PROVIDING AN ARBITRARY THREE – DIMENSIONAL MICROSTRUCTURE IN SILICON USING AN ANISOTROPIC DEEP ETCH."

ON PAGE 12

AT ORIGINAL LINE 5 OF THE SPECIFICATION, IN THE PARAGRAPH BEGINNING WITH THE WORDS "After drying " AND ENDING WITH THE WORDS "...below in Table 1." PLEASE AMEND THE SPECIFICATION AS FOLLOWS:

After drying the developed resist, the now patterned resist layer **18** is subjected to a multi-step anisotropic etching process. The process used in the present invention employs a low pressure reactive plasma **30** for etching silicon, comprising principally sulfur hexafluoride, followed by a second low pressure plasma for ~~etch~~ etching the photoresist, consisting essentially of oxygen. Both etching steps are carried out at pressures of about 20 – 50 mTorr, for between about 2 to about 10 second. Parameters used for etching the substrates of the present invention are shown below in Table 1.

ON PAGE 13 AND CONTINUING TO PAGE 14

AT ORIGINAL LINE 27 OF THE SPECIFICATION, IN THE PARAGRAPH BEGINNING WITH THE WORDS "As shown in **FIG. 2B**, " AND ENDING ON PAGE 14 WITH THE WORDS "...and conductive layer." PLEASE AMEND THE SPECIFICATION AS FOLLOWS:

As shown in **FIG. 2B**, after etching the silicon wafer **10**, any remaining resist layer **18** is removed and the part cleaned leaving substrate **10** with a etched cavity **22** across the top surface of the wafer comprised of walls and floors **28** and **29**. The entire surface is subsequently covered with a thin, electrically conductive metal film **26**, as shown in **FIG. 2C**, in preparation for a much heavier coating. The chosen process for applying the first thin coating of **FIG. 2C** is a thermal evaporation or ~~physical~~ particle vapor deposition (PVD) process, although any other coating process which would provide a thin, continuous layer of conductive material would be equally effective. However, any such processes must be able to coat both the surfaces **28** and **29** of cavities **22**. Such methods could include, but are not limited to, sputtering and chemical vapor deposition or spraying coating methods, and only require that the coating process provide a continuous, adherent, and conductive layer.

ON PAGE 14

AT ORIGINAL LINE 14 OF THE SPECIFICATION, IN THE PARAGRAPH BEGINNING WITH THE WORDS "The simplest method of preform fabrication " AND ENDING WITH THE WORDS "...replaced the rod-in-tube technique." PLEASE AMEND THE SPECIFICATION AS FOLLOWS:

Finally, if ~~If the~~ article **40** is to be used as a gray-scale mask ~~plating~~, as is shown in **FIG. 3**, then the step of depositing metal layer **31** is followed by a final planarizing step to remove the "backing" portion of ~~depositing~~ layer **31**~~, as shown in FIG. 3, and provides~~ in order to provide flat, smooth surface **32**. The planarizing step is typically performed by lapping until the surface **11** of the silicon is reached leaving the embedded metal pattern **33** exposed. (Planarizing removes the overburden x-ray blocking metal layer on the top surface of the substrate leaving only the metal deposited in the etched cavities.)